

WHAT IS CLAIMED IS:

1           1.     A method for providing printer recognition and management of a print  
2 job entity, comprising:  
3           establishing a repository of attributes and status information associated with  
4 each print job that passes through a printer system; and  
5           providing an interface to a plurality of components to allow access to the  
6 attributes and status information in the repository by the plurality of components.

1           2.     An apparatus for providing printer recognition and management of a  
2 print job entity, comprising:  
3           a repository of attributes and status information associated with each print job  
4 that passes through a printer system; and  
5           an interface to a plurality of components, the interface providing access to the  
6 attributes and status information in the repository by the plurality of components.

1           3.     The apparatus of claim 2 wherein the interface comprises at least one  
2 of a Web Page channel, a multiplexer to manage the routing of jobs to the print  
3 engine and a spooler, a job control function interface, a pipeline interface, an  
4 operations panel interface and a pull print interface.

1           4.     The apparatus of claim 2 wherein the interface provides an ability for  
2 components to process a job according to requirements of the component and  
3 reports job attributes and processing status of the job for common access by other  
4 components.

1           5.     The apparatus of claim 2 wherein the interface provides access to  
2 maintained job variable to the components.

1           6.     The apparatus of claim 2 wherein the interface provides a component  
2 access to common variables, the components presenting job attributes or status to  
3 the interface.

1           7.     The apparatus of claim 6 wherein the attributes are presented  
2 according to requirements dictated by the interface

1           8.     The apparatus of claim 2 wherein the interface provides the ability for  
2 components to create job entries, obtain and set job attributes, manipulate the state  
3 and status of jobs in the system, and obtain job ordering information pertinent to the  
4 calling component.

1           9.     The apparatus of claim 2 wherein the repository provides a global view  
2 of jobs within the printer, the global view includes an actively printing job, jobs in the  
3 process of being spooled, jobs on the spool queue, and jobs on the pull print queue.

1           10.    The apparatus of claim 2 wherein the interface accommodates either  
2 implementation of port connection managers and pass job information from a port  
3 connection manager to the repository.

1           11.    The apparatus of claim 2 wherein the interface cancels jobs.

1           12.    The apparatus of claim 11 wherein a cancelled job comprises a current  
2 job.

1           13.    The apparatus of claim 11 wherein a cancelled job comprises a job  
2 having a selected attribute.

1           14.    The apparatus of claim 2 wherein the a repository and interface are  
2 provided by a job monitor, the job monitor further providing logical views to obtain a  
3 next job to be processed by a component and to obtain a list of all jobs in the order  
4 that they are processed.

1           15.    The apparatus of claim 2 wherein the job monitor obtains a Job  
2 identification, performs a query for attributes of a job, updates job attributes, cancels  
3 jobs, provides logical views of a job, handles printer events, gets attributes of the  
4 printer and sets printer attributes.

1           16.    The apparatus of claim 15 wherein the attributes are updated through  
2 the job monitor.

1           17.    The apparatus of claim 15 wherein the job monitor provides the ability  
2 for any component to set job attributes.

1           18.    The apparatus of claim 15 wherein the job monitor uses job states to  
2 control the flow of jobs.

1           19.    The apparatus of claim 15 wherein the job monitor responds to a  
2    component call, determines a next job to process, the component determining valid  
3    states for a call.

1           20.    An article of manufacture comprising a program storage medium  
2    readable by a computer, the medium tangibly embodying one or more programs of  
3    instructions executable by the computer to perform a method for providing printer  
4    recognition and management of a print job entity, the method comprising:  
5           establishing a repository of attributes and status information associated with  
6    each print job that passes through a printer system; and  
7           providing an interface to a plurality of components to allow access to the  
8    attributes and status information in the repository by the plurality of components.